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A Bridge Too Far; the Strive to Establish A Financial Service Regulatory Authority (OJK) in Indonesia[1]

Rimawan Pradiptyo[2]
Gumilang Aryo Sahadewo
Banoon Sasmitasiwi

Department of Economics
Faculty of Economics and Business,
Universitas Gadjah Mada
Indonesia

Rofikhoh Rokhim[3]
Maria Ulpah
IAA Faradynawati

Department of Management
Faculty of Economics
Universitas Indonesia
Indonesia

Abstract

The Government of Indonesia (GOI) has been proposing a draft act on financial service regulatory authority, called Otoritas Jasa Keuangan (OJK hereafter). In the aftermath of 1998 Asian crisis, the establishment of the institution was mandated through Bank Indonesia Act (Indonesia's central bank bill) in 1999, which was later updated in 2004. According to the draft act, the OJK has been designed using an integrated approach, which is similar to the arrangement of FSA in the UK. This paper aims to examine the feasibility of establishing OJK. The existing financial supervision suffers from several problems: a) the quality of supervisions tend to be heterogeneous among the financial supervision bodies, b) there is a gap in supervision, whereby thousand of non-banking financial institutions have not been supervised properly, and c) financial offences have been flourishing in inter market transactions. We found that the establishment of OJK, however, would not minimize, let alone, resolve the problems above. The draft act has not proposed a mechanism on how to address these very issues. We estimated the minimum irreducible costs of establishing and operating OJK and found that the costs are paramount. According to the draft act, the costs would burden all financial institutions and obviously this creates complexity in financing OJK. Finally, two alternative approaches have been proposed in order to improve the feasibility and the effectiveness of the OJK by considering the structure of financial sector supervision in Indonesia.

Keywords: Financial sector regulatory authority, supervision framework design, feasibility study
JEL Classification: E60, G28, L50

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[2] Contacting email: rimawan@feb.ugm.ac.id or rimawan@gadjahmada.edu
[3] Contacting email: rofikoh.rokhim@ui.ac.id

1. Introduction

The ever tremendous development of financial sector is calling for the importance of sound supervision and regulation of financial sector.[4] Financial sector is the focal point of an economic system, failure in the sector will most likely destabilize the economy (Stiglitz, 1994). The Asian 1998 financial crisis, for example, was the costliest ever recorded for Indonesia. The bailout of banking sector accounted for about 50% of Indonesia's GDP at that time and the economy shrank by about 13% as the aftermath. This phenomenon is in line with World Bank's (2009) argument that breakdown of financial sector leads to economic slowdown. Many countries reassign the role of financial sector supervision from their central bank to independent supervision in the wake of 1998 Asian economic crisis.

Historically, monetary authority established a financial supervision authority as a precautionary action to minimize the potential of economic crisis. The structure of the authority is established in such a way in order to stabilize financial system in normal state and to withstand the shocks in period of crisis. However, many believe that blips in the regulation of financial sector triggered the crisis in 2008. One of the major blips was the lack of supervision, which include macroprudential supervision, by the authority (Group of Thirty, 2009; Brunnermeier *et al.*, 2009; de Larosiere Group, 2009; Kawai dan Pomerleano, 2010).

There are five financial supervision approaches that are practiced around the world: institutional[5], functional[6], integrated[7], twin peaks[8], and dual system[9]. Each approach offers different advantages and disadvantages and there is no rule of thumb to decide which one is better. It is interesting to note that even if two countries adopt a similar approach, the optimal function and structure of the authority may vary (The Group of Thirty, 2008). Several studies

[4] Regulation role refers to policy making activities while supervision role refers to activities to ensure the industry's conformity with the regulation.
[5] Firm's legal status determines which regulator is assigned to supervise their activities (China, Hongkong, and Mexico).
[6] Firm's type of transaction determine the authority without regard to their legal status (Brazil, Italy, and Spain)
[7] Single authority to practice the safety and soundness supervision and conduct-of-business regulation (Canada, Germany, Japan, Qatar, and United Kingdom)
[8] Safety and soundness supervision and conduct of business regulation is assigned to two different authorities (Australia and Netherland)
[9] Supervision authority with functional and institutional approach (United States).

suggest that there is no best practice that can be applied to all economy in general.[10] Barth et al. (2004) found that multiple regulatory approaches may not necessarily enhance the performance of the sector. These findings indicate that the structure of a financial supervision authority must be established uniquely to conform to the economic system in a particular country.

Indonesia is on the verge of establishing Otoritas Jasa Keuangan (OJK hereafter), the financial sector regulatory authority, which intend to adopt the integrated approach. The institution was proposed over a decade ago through article 34 of the Bank of Indonesia Act in 1999 and it was later ammended in 2004 regarding the role and function of Bank Indonesia (Indonesia's central bank). It should be noted that the existence of the article was greatly influenced by the outcome of 1998 Asian crisis and the ongoing trend around the world to introduce such authority in various countries.[11]

The Act mandates that banking supervision should be conducted by an independent institution, called Lembaga Pengawas Sistem Keuangan (LPSK) The article, however, does not specify a particular approach that should be exercised by the institution. The government, however, suggested that the institution should adopt the integrated approach, similar to FSA in the United Kingdom, and called the institution as Otoritas Jasa Keuangan (OJK). The Act mandated that OJK supervises all financial sectors in Indonesia including banking, insurance, stock market, pension fund, venture capital, financing companies, mutual funds, and other institutions that collect funds from the economy.

This paper aims to examine the feasibility of OJK by considering the structure of financial sector in Indonesia. Section 2 describes the structure of financial sector in Indonesia. Section 3 discusses the complexities and advantages of OJK's structure as proposed by the government. In order to analyse the feasibility of the OJK, cost of establishment and operation of OJK was conducted. Section 4 presents the estimation of the establishment and the operation costs of the OJK. Section 5 discusses two alternative models of supervision in financial sector by

[10] Nier (2009), Cervellati dan Fioriti (2007), Barth *et al*. (2002, 2004) dan Crockett (2001)

[11] Under Indonesian constitution, every single article should be based on and backed up by findings from academic paper. Unfortunately, there is no record on that the existence of the article was justified by academic papers.

revitalizing the existing supervision bodies. The models have been designed by taken into consideration the structure of financial sector in Indonesia.

2. Structure of Financial Sector in Indonesia

Financial sector in Indonesia is comprised of two main industries: banking and nonbanking. The banking industry in Indonesia consists of conventional banks, Syaria banks, and people's credit banks (BPR hereafter). Nonbanking industry consists of insurance, stock market, pension fund, cooperatives, pawn system (Pawn office hereafter) and financing companies. Table 1 shows the number of financial institutions in Indonesia excluding cooperatives.[12]

Table 1. Number of Financial Institutions in Indonesia excluding Cooperatives

Financial Institutions	**Number of Institutions/Issuers**
Banking sector	
Conventional bank[1]	121
People's Credit Banks (BPR)	1.712
Syariahs[2]	169
Sub Total (A)	*2.003*
Insurance[3]	144
Stock market	499
Bond market	184
Security Companies	158
Pawn office	1
Pension Fund	406
Financing Companies	212
Venture Capital Firms	66
Sub Total Non-Banks and Non-Coperatives Finansial Institutions (B)	*1.670*
Total (A + B)	**3.672**

Source: BI (2010e), Bapepam-LK (2009), Biro Dana Pensiun (2009), Biro Perasuransian (2008)
[1] Number of conventional Banks and Rural Banks, May 2010
[2] Syariahs covered Common Syariah Banks, Syariah Unit Business and Rural Syariahs
[3] Insurance covered Life Insurance, Reinsurance, Social Insurane, Civil Sevants Insurance. Indonesian National Army, Police of The Republic of Indonesia.
[3] The number of capital markets issuers based on first quarter data 2009

Table 1 reveals that the proportion of banking industry accounted for 56.7% of the financial sector. Banking industry also dominates the share of asset in financial sector (Figure 1). The asset of banking industry accounted for 87% of the total asset, while the rest is contributed by

[12] BPR practices similar banking principles and their activities comprise of savings and term deposits, loans but they cannot offer checking account. BPR may practice conventional or Syaria banking principles. Financing companies include leasing company, consumer financing company, and venture capital.

six different nonbanking institutions. It is interesting to note that the share of financing companies exceed the share of other nonbanking institutions.[13]

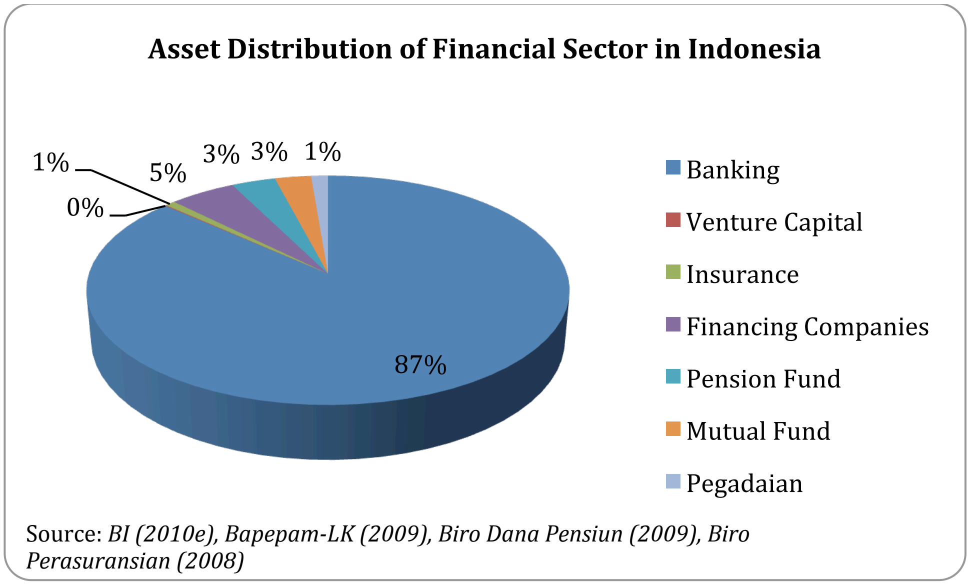

Figure 1: Asset distribution of financial sector in Indonesia

The total assets of financial sector in Indonesia accounted for Rp2,671 trillion in 2008 as shown in Table 2. The share to GDP which accounted for 47.6%, which suggests that the financial sector has a significant contribution to the economy. Pawn office, financing companies, and bank achieved the highest asset growth during 2006-2008. It should be noted that pawn office's asset increased significantly by 114.9% while financial companies' and bank's assets grew 54.7% and 36.7% respectively during 2006-2008.

[13] Nonbanking sector exclude cooperatives hereafter or otherwise stated.

Table 2. Assets and Financial Institution Activity Value

Financial Institutions	Assets (Trillion rupiahs)			Core Activity Value (Trillion rupiahs)[1]		
	2006	2007	2008	2006	2007	2008
Banking (A)	1,693.5	1,986.5	2,310.6	832.9	1045.7	1353.6
Non-Bank Financial Instutions (B)						
Venture Capital	3.0	2.8	2.1	1.5	4,7	5,0
Insurrance	16.2	19.1	22.7	152.9	202,3	211,2
Financing Companies	93.1	107.7	137.5	93.1	107,7	137,5
Pension Fund	77.7	91.2	90.2	75.0	88,0	86,4
Mutual Fund	72.1	73.1	74.1	-	-	-
Pawn Office	18.4	22.8	33.8	18.4	22,8	33,8
Total Non-Bank Financial Instutions Assets (B)	280.5	316.7	360.4	340.9	425,5	473,9
Total Financial Sector Assets (C = A+B)	1,974.0	2,303.2	2,671.0	1,173.8	1471.2	1827.5
Proportion of Banking (A/C)	85.79%	86.25%	86.51%	70.96%	71.08%	74.07%

Source: compeled from BI (2010b;2009), Bapepam-LK (2009), Pawn office (2010)
[1] Value of activity based on the amount of credit (baning), loan amount (mortgage), the amount of financing (financing and venture capital firms), and total investment (insurance and pension funds).

Financial sector's main activities comprise of deposits, credits, financing, and investment. The value of these activities grew 24.2% to Rp1,827.5 trillion in 2008. Financial institutions, which achieved the highest growth during 2006-2008, are venture capital (233.3%), pawn office (83.7%), and bank (62.5%). The increase in the value of their activities illustrates the momentous development of the sector in Indonesian economy. The intermediary role of the sector becomes more important as the economy's gear shifts up.

Tabel 3 Indonesian Micro Financial Institutions Profile, until 2009

Type of Institution	Number (unit)	Credit Position		Deposit Position	
		Customer	Total (billion rupiahs)	Customer	Total (billion rupiahs)
Formal					
Banks (supervised by Bank Indonesia)					
BRI (BRI, 2009)	4.029	4.918.000	130.266	30.000.000	32.000
Danamon DSP (Danamon, 2009)	1.200	-	12.300	-	-
Bank Mandiri Micro Business Unit (Mandiri, 2009)	976	430.000	5.400	-	-
BTPN (BTPN, 2010)	105	160.000	250	-	-
Bank Mega Syariah (Bank Mega, 2009)	210	-	1.000	-	-
Bank BNI SKC (Bank BNI, 2009)	169	339.000	3.590	-	-
BPR (March 2004)	2.296	2.718.000	25.746	5.610.000	9.254
BKD (Profi GTZ, 2005)	5.345	675.000	233	507.000	39
Total Bank (A)	*14.330*	*9.240.000*	*178.785*	*36.117.000*	*41.293*
Cooperatives (supervised by Small and Medium Enterprise Ministry, KUKM)					
KSP (The Ministry of KUKM, 2009)	3.200	655.000	531	-	85
USP (The Ministry of KUKM, 2009)	66.352	-	3.629	-	1.157
KJKS (The Ministry of KUKM, 2009)	264	-	-	-	-
UJSK (The Ministry of KUKM, 2009)	524	-	-	-	-
BK3D (Desember 2003)	965	964.000	3236		199
BMT (Oktober 2004)	3937	1.175.000	1.980	-	209
Credit union and NGO (Oktober 2004)	1,146	397.401	506	293.648	188
Total Non-bank Cooperatives *(B)*	*76,388*	*3,191,401*	*9882*	*293,648*	*1838*
Non-bank Non-Cooperative (supervisored by Capital Market Supervision Agency, Bapepam-LK)					
Swamitra (2003)	177	32.000	127	55.000	56
LDKP (Profi GTZ, 2005))	239	1.326.000	1076	-	334
Pawn office (Pawn office, 2009)	3.100	14.300.000	49.000	-	
UlaMM (PNM, 2009)	184	13.021.000	800	-	-
LKM LSM	1047	286.000	449		
Total Nonbank Non-Koperasi (C)	*4747*	28,647,318	51452	*55.000*	*1.831*
Total (X+Y)	**94.320**	**41.078.719**	**240.119**	**36.465.648**	**43.521**

Sources: compiled form Ashari (2006), *The Ministry ofThe Ministry KUKM (2009), GTZ (2005); BTPN= Bank Tabungan Pensiunan Nasional; BKD = Badan Kredit Desa; KSP = Koperasi Simpan Pinjam; USP = Unit Simpan Pinjam; BK3D = Badan Koordinasi Koperasi Kredit Daerah; LDKP = Lembaga Dana Kredit Pedesaan; Kukesra = Kredit Usaha Kesejahteraan Rakyat; PNM ULMM= Permodalan Nasional Madani Unit Layanan Modal Mikro; KJKS=Koperasi Jasa Keuangan Syariah; UJSK=Unit Jasa Syariah Koperasi.*

Microfinancial services also play vital role in the development of financial sector. Their asset may not be as big as the big players, but they serve a vast market, particularly middle and lower income communities. There are 94,320 microfinancial services across the country which serves more than 36 million customers in 2009 (Table 3). Caution should be taken in analyzing the data since the data may not revealed the factual figure; many firms have not been accounted due to lack of information. There are also many informal institutions that collect fund from the society such as social gathering known as *arisan* and loan sharks that typically target small business.

Tabel 4: The Profile of Indonesian Microfinance Programs, until 2003

Institution Type	Number of Units	Credit Position	
		Number of Custumers	**Total (Billion Rupiahs)**
Programs			
Kukesra (Juni 2002)	-	10.300.000	754
PPK (Desember 2002)	15.481	300.000	243
P4K (Mei 2002)	15.481	300.000	243
P2KP (September 2003)	2.227	3.200.000	500
PKM (Juni 2003)	1.140	2.300.000	649
PEMP (Desember 2003)[1]	481.000	-	308
IMS-NTAADP (Desember (2003)	214	58.000	42
IMS SAADP	592	94.000	100
Total Program	***35.135***	***17.033.000***	***2.839***

Source: compiled form Ashari (2006); *Kukesra = Kredit Usaha Kesejahteraan Rakyat* (People's Walfare Business Credit) *;PPK = Program Pengembangan Kecamatan*(Sub-district Development Program)*; P4K = Pembinaan Peningkatan Pendapatan Petani dan nelayan Kecil*(Small Farmers Income Generating Project)*; P2KP = Program Penanggulangan Kemiskinan di Perkotaan*(Poverty Alleviation Project in Urban Areas)*; PKM = Pendidikan Kewirausahaan Masyarakat*(Enterpreneurship Education Program)*; PEMP = Pemberdayaan Ekonomi Masyarakat Pesisir*(Littoral Community Economic Empowerment)*; IMS = Inisiatif Masyarakat Setempat*(Local Community Initiative).

Government-initiated loan programmes are also part of the country's nonbanking sector. The assets and activities may not be as big as those of banking sector but they serve a significant number of customers, especially in remote areas. These programme are also vital in lifting the social welfare as they target poor communities. There are 35,135 programmes whispread across regions as shown by Ashari (2006). Those programmes serve more than 16 million customers with total loans of Rp2.8 trillion (Table 4).

There are several questions which may be raised in accordance with microfinance. Who is in charge of supervising the industry? Does the supervision by the authority include all existing form of financial institution? The financial sector is currently supervised by three regulators: Bank of Indonesia, Bapepam-LK (Capital Market and Financial Institution Supervision Agency), and The State Ministry of Cooperatives and Small and Medium Enterprises (The Ministry of KUKM hereafter). Bank of Indonesia is responsible in regulating and supervising bank and BPR. Bapepam-LK takes charge in the supervision of insurance companies, pension fund, pawn office, and financing companies. The Ministry of KUKM is mainly in charge in supervising cooperatives, credit unions and *baitul mal wat tamwil* (BMT).[14]

Bank of Indonesia, the country's monetary authority, has a central role in the supervision of financial sector as a whole through macroprudential supervision and banks in particular through microprudential supervision. Macroprudential supervision authorizes Bank of Indonesia to oversee the activity of financial supervision as a whole. On the other side, microprudential supervision empowers Bank of Indonesia to oversee the performance and conduct-of-business of banks, ensuring the wellbeing of each bank in the industry. Bank of Indonesia practices microprudential supervision to banking through on- and off-site supervision. These activities are performed by 42 offices across Indonesia.

The Ministry of KUKM has the role of supervising cooperative which comprise of credit union and *Baitul Maal Wat Tamwil* (BMT hereafter). There are about 76,000 cooperatives with annual revenue of Rp55 trillion. The Ministry of KUKM has 497 regional offices in across Indonesia which is referred as Disperindag (Trade, Industry, and Cooperative Agency). The major challenge that The Ministry of KUKM faces is the lack of microprudential supervision to cooperatives. Even though a failure of a cooperative will not be detrimental to the whole economy, the impact to a particular community might be devastating.

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[14] BMT is a syariah-based microfinance. The BMT does not follow cooperatives principles, conversely, BMT has characteristic similar to that of banks.Thus, BMT possesses systemic risk too. However, the GOI decided to categorize BMT as a cooperative-based microfinance.

The Structure of Financial Institutions Supervisor in Indonesia

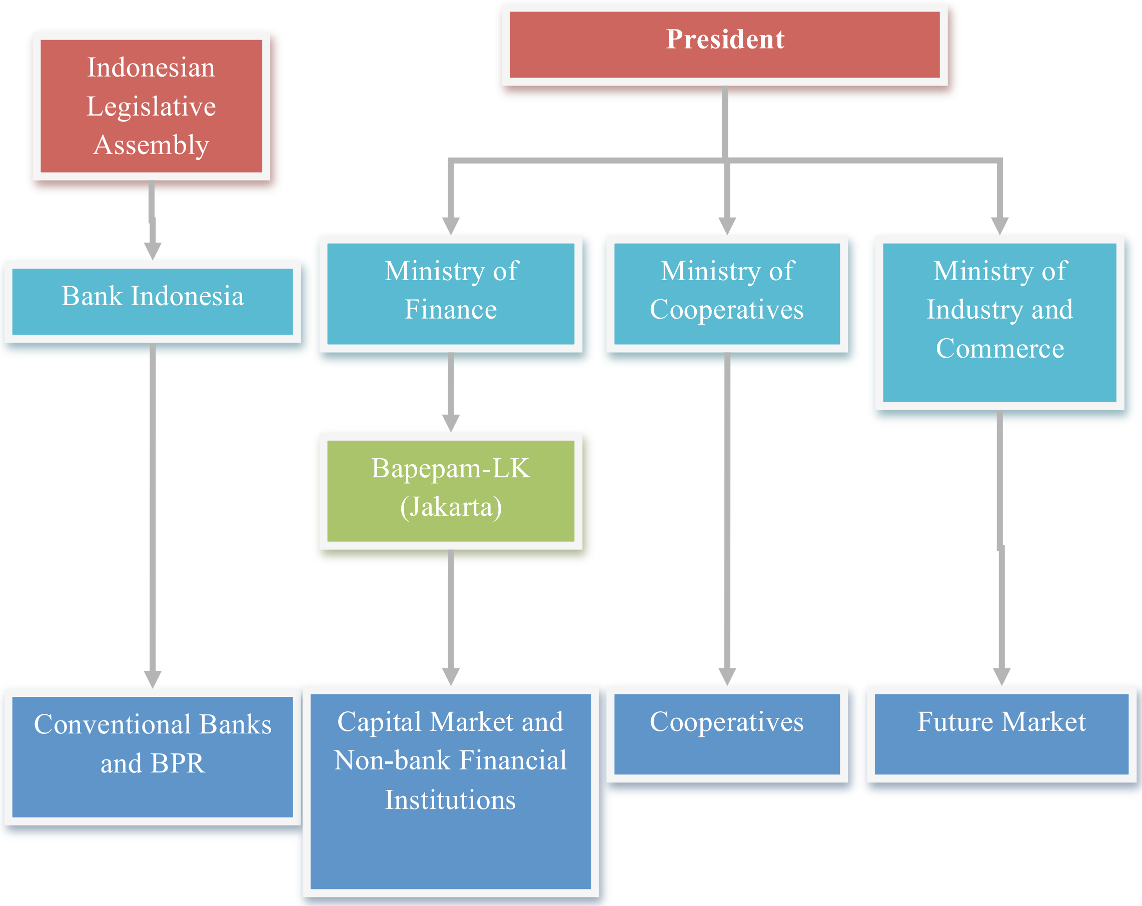

Figure 2: Structure of Financial Sector Supervision

In contrast to the other two regulators, Bapepam-LK oversees more diverse financial entities including stock market, insurance, pension fund, *pawn office*, and financing companies. The regulator supervises a total of 1,670 financial entities. They also have the responsibility to supervise 4,747 microfinancial entities. Surprisingly, the burden of supervision activities is conducted through a single office only, as Bapepam-LK is only situated in Jakarta. In contrast to the other two regulators, Bapepam-LK has a special right to investigate and prosecute institutions they supervise. Nevertheless, a huge blind spot in the coverage of Bapepam-LK supervision may hinder the Bapepam-LK to have a good performance in supervising non-cooperative and non-banking financial institutions.

Figure 2 suggest that the structure of financial sector supervision in Indonesia has not been thoroughly designed. The current structure creates an enormous *no man's land* of supervision in the sector. First, there are many financial institutions which are yet to be supervised by the existing regulators, particularly Bapepam-LK and The Ministry of KUKM. Nonbanking institutions are ideally supervised by Bapepam-LK however there is a doubt that Bapepam-LK has sufficient infrastructure to perform financial supervision in all regions, considering the fact that Bapepam-LK does not have any regional office. This circumstance hinders Bapepam-LK to carry out thorough supervision, particularly microprudential supervision. It is essentially impractical, if we cannot say a herculean task, for Bapepam-LK to perform on- and off-site supervision.[15]

Second, the supervision arrangements of three existing institutions are essentially different. This may not seem to be a problem if each regulator supervises institutions with similar characteristic. In practice however, many institutions with similar characteristic has been supervised by different regulators. Bank of Indonesia tends to implement prudential principle in their supervision activities while Bapepam-LK applies conformity-to-rule principle. Bapepam-LK's principle is considered to be effective for the stock market, however, it may not be the case for nonbanking institutions. The rationale is that the majority of nonbanking activities are in fact similar to banking thus it possesses systemic risk from their activities.[16] The Ministry of KUKM tends to focus on cooperative principles in their supervision approach, however the measures may not be effective in supervising credit union and BMT, which have similar characteristics to banking institution as oppose to that of cooperative.

Third, there is a discrepancy in the quality of supervision between the three existing institutions. Bank Indonesia is the only one that is able to perform thorough supervision, both on- and off-, to each and every institution. This situation creates a loophole in the financial industry: investors tend to establish non-banking institutions or cooperatives where supervision is relatively loose. The effect of this situation is the ever-growing numbers of entrants in the non-banking industry. The main concern is a tendency of increasing the

[15] Historically, Bapepam was established to supervise the stock market. Later on, Bapepam was assigned to supervise non-banking institutions. Significant increase in supervision burden, however, was not matched with major improvement in infrastructures and resources.

[16] We may argue that insurance is not included in this instance

likelihood of systemic failure as some institutions in non-banking industry possess systemic risk, e.g. BMT.

3. OJK: Its Structure and Complexity

According to OJK Draft Act, the role of OJK is to supervise all financial institutions that accept funds from third party. It is apparent that the scope of OJK's supervision is vast and it seems too ambitious, as stated in article 34 of the Bank of Indonesia Act:

> *The financial services authority which will be established perform supervision in banking and other financial services such as insurance, pension fund, security, venture capital, financial capital, and* ***other entity that accepts deposits from the public****.*

The same scope has been defined in article 1 of OJK Draft Cct. In addition, the definition of nonbanking institution as stated in article 1, verse 7 of OJK Draft Act is given as follows:

> *Nonbanking financial industry is referred as financial services by financial institutions other than banking which comprise of pension fund, financing institution, credit insurance, pawn, other institutions that arrange social insurance and mandatory welfare program, and* ***other nonbanking financial industries.***

The article 1 of OJK Draft Act implies that OJK will supervise all institutions in both banking and non-banking sector, irrespective whether the institution is in the form of cooperative or non-cooperative, whether the institution is based on syariah or conventional financial system, and whether the scale of the institution is large or micro. Indeed, the scope of supervision which would be conducted by OJK is unprecedentedly vast, if not overtly ambitious.

Figure 3 illustrates the mechanism of unification of Bapepam-LK and Bank Indonesia into OJK. The unification process into OJK is pretty straightforward; banking supervision division in Bank Indonesia will be merged with nonbanking and stock market supervision division in Bapepam-LK. Obviously both Bank of Indonesia and Bapepam-LK have their own standard operating procedure and code of conduct in supervision. The Draft Act, however, has not stated the mechanism on how the process of unification of both divisions in OJK. According to the

Draft Act, OJK has been designed using integrated approach, similar to financial service authorities in the UK, Japan and South Korea.[17]

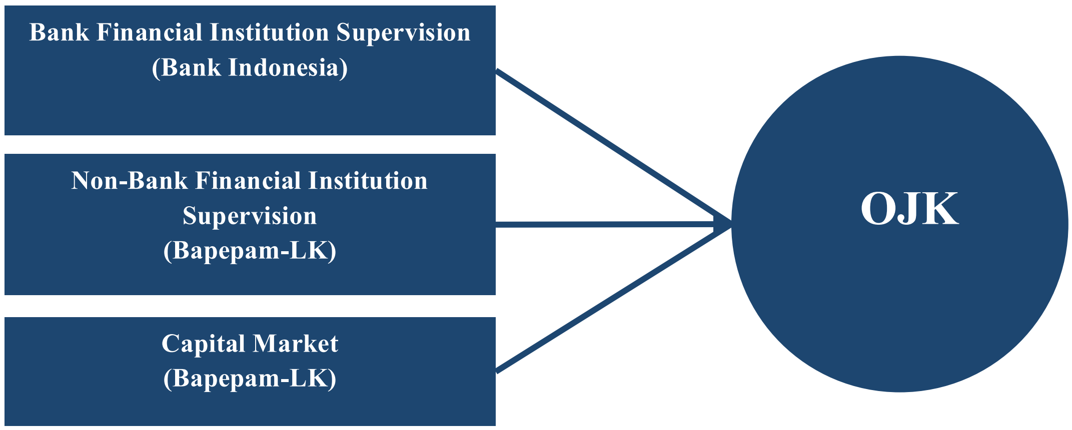

Figure 3. Transfer of Functions of Financial Sector Supervision to OJK

Figure 4 shows the organisational structure of OJK as proposed in the Draft Act. A board of commissioner would be in charge of OJK. The board would oversee three head of executives which would supervise banking industry, nonbanking industry, and stock market. The head of executives would be assisted by five deputies and managing director. Their tasks alongside head of executives are to perform microprudential and conduct-of-business supervision.

Idealy the members of the committee should consists of representatives from Bank Indonesia and Bapepam-LK, as they have a long track record in financial supervision. There is no certainty, however, that this ideal formation will be embraced in OJK. There is a strong tendency among members of the parliament who propose that the members of the committee should be bureaucrats. Instead, the members of the committee should be from society, who are not bureaucrats.

A serious problem will be emerged if the latter idea would be embraced in OJK. It should be noted that according to the Draft Act, the house of representative has a right to conduct a fit and proper test and subsequently choose the members of the committee. If the members of the committee do not represent any financial supervision institution, the question is whether the

[17] Recently, the structure of financial services supervision tends to move away from integrated approach. Supervision of banks and insurance in UK has been reassigned away from FSA to Prudential Regulation Authority (PRA) which is a subsidiary of Bank of England (Bank of England and FSA, 2011). Lawmakers in South Korea also support the assignment of Bank of Korea as supervisory authority for financial services (Kim, 2011).

members of the committee have a sufficient credential to hold the position? Even if the members of the committee have the credential required, however, it can be ascertain that the majority of the members were ex practitions in financial sector. In this case, the impartiality of the members to particular groups where they previously worked with is questionable. Further serious problem will be emerged if some or the majority of the members have close connection to political parties.

It should be noted also that the house of representative has a right to monitor and to supervise the executives. In this case, all OJK officers, including the members of committee, are the executives whom are supervised and monitored by the house of representative. A complexity will be emerged since the house of representative has responsible to conduct fit and proper test, to choose the members of the committee and to minitor and to supervise the OJK including the members of the committee. Accordingly, the impartiality of members of the house of representative in supervising and monitoring thoroughly the OJK is questionable.

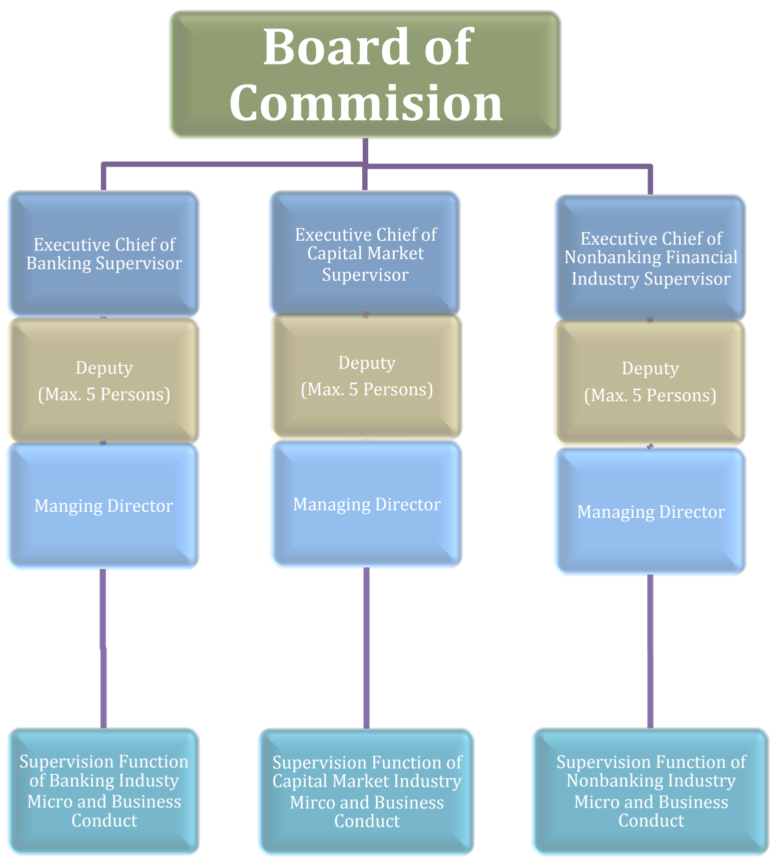

Figure 4: The Organisational Structure of OJK

According to the Draft Act, OJK would be given the right to investigate financial institutions and file prosecution if necessary. Currently, Bapepam-LK is the only regulator that retains the right. Bank Indonesia and the Ministry of KUKM, on the other hand, must report any illegal practices to the law enforcement agency, i.e. police. The law enforcement does not have adequate resources to deal with crime in finance. Thus, the investigation and prosecution need prolonged period and loopholes may arise. The fact that OJK is given the right to investigate will help promoting compliance from the supervised institutions.

Article 37 of OJK Draft Act asserts that OJK is responsible to hold coordination with Bank Indonesia, Ministry of Treasury, and Indonesia Deposit Insurance Company Cooperation (LPS hereafter). The coordination will be facilitated in a forum referred as Financial Sector Stability Forum (FSSK). The concern is that the OJK Draft Act does not explicitly state the detail of coordination that must be done by the four institutions. In particular, there is no agreement regarding responsibility of each institution in the time of crisis. This might lead to "pass the bucket" behavior which is not ideal.

Articles 30-33 of OJK Draft Act discuss the method of financing OJK. In the first three years of transitional period, the costs of OJK would be bourne by both Bank of Indonesia and Bappepam. After the period, the supervision costs would be bourne by each financial institution in financial sector. Each supervised institution has to pay fees to OJK. The imposition of fee will be unique to each firm by considering its asset, profit, cash flow, and equity. Fees that will be imposed are permit fee, approval fee, registration fee, supervision fee, inspection fee, and many more. The fees obtained from the industry can only fund operational activities and the surplus will form reserve. This reserve can only be invested in government bond or Bank Indonesia certificates.

There are several issues which should be discussed in relation to the structure of OJK as described in the Draft Act. Some complexities in the establishment of OJK are as follows: (1) the scope of OJK which is to vast and their supervision practices are inconsistent; (2) the regulatory task that rather neglect macroprudential supervision; (3) problematic role of Bank Indonesia as the lender of the last resort; (4) there is no sufficient details in the coordination measures among related regulators; (5) weak argument in the imposition of fee to fund OJK;

(6) potency that Law of OJK run into other established Law such as Law of Bank Indonesia, Law of Bank, and several more.

There is an issue in the scope of supervision of OJK which does not include cooperatives. Any cooperative-based financial institution will still be supervised by The Ministry of KUKM. This is inconsistent and contradicts with the proposed scope of OJK in article 1 of OJK Draft Act that OJK would supervise *all* forms of financial institutions. The issue will not be crucial if the number of cooperatives is small. Nevertheless, the fact shows the contrary; there are as many as 71,000 cooperatives in Indonesia and their assets reached Rp55 trilion annually

It is surprising that the role of OJK does not really focus on macroprudential supervision in the financial industry. Banking industry has the biggest share in Indonesia financial sector portfolio; hence, the industry inherently possesses systemic risk. Nonbanking financial industry's share in the portfolio is relatively small; however, their activities have expanded vastly and penetrated the market rather deep. There is a strong tendency that nonbanking financial institutions has opened their branch offices across Indonesia, therefore, the industry also presents systemic risk. This argument addresses the importance of macroprudential supervision throughout *all* financial industry.

Bank of Indonesia has been the lender of the last resort for banking industry and at the same time performs macroprudential supervision. Bank of Indonesia performs on- and off-site supervision and closely monitors real time data to keep track of the industry's wellbeing from time to time. The issue that might arise is that whether Bank of Indonesia still has sufficient access and data to banking industry if its supervision is transferred to OJK. This will definitely create a gap between Bank Indonesia and necessary data to perform their tasks. This is very risky as witnessed in United Kingdom during recent financial crisis. Bank of England could not obtain sufficient data regarding Northern Rock Bank. Once they were able to obtain the data, Northern Rock had already collapsed.

There is urgency for coordination between the four institutions. However, such will not be optimal if there is no legal detail regarding the coordination. In the world of bureaucracy—particularly in Indonesia—coordination between two agencies is very impractical.

Coordination only means face-to-face meeting without any arrangement of responsibility and measures for each responsibility.

Pradiptyo et al. (2010) establish a prisoner's dilemma experiment with random matching players and payoff perturbation. The experiment was completed at Universitas Gadjah Mada involving academic civics. The results show staggering insights: the portion of cooperation throughout game never exceeds 2%. The results differ significantly to that of previous researches such as Selten and Stoecker (1986) and Cooper et al. (1996). The implication of the result is straightforward, the subjects have lower tendency to cooperate compare to those in other countries. Frankly, coordination is easily said than done in Indonesia.

Supervision mission by Bank Indonesia, Bapepam-LK, and the Ministry of KUKM has the nature of public goods. It is nonexcludable and nonrivalry for all financial institutions. The implication is that the future supervision authority will regulate all institutions without imposing any fee. There will be a query if the fee is imposed to the industry that is whether the fee will be financed by tax or retribution. If the fee is considered as tax, then there may be a double taxation imposition to financial industry as each institution has already paid income tax. There are several questions which may be raised if the fee is considered as tax. How will the tax effects the welfare of the economy? Who will bear the burden of the tax?

Supervision mission of OJK will switch to common resources if the fee imposed is in the form of retribution. If the fee is considered as a retribution, the immediate question which can be raised is that what is the immediate benefits which would be received by the supervised institutions? The nature of the fee will transform financial supervision from public goods to be common resources. This implies that OJK does not have the compulsion to supervise that institution if a particular institution is not willing to pay for the fee. The outcome of such scheme is rather counter intuitive.

The imposement of fee to the supervised institutions has the potential to flourish corruptions in financial supervision in practice. Under the scheme, bribery as well as extortion is likely to be the possible outcome. The fact that organized crime and conglomeration have been growing stronger creates further complexity to the scheme. As long as supervision of the industry is transactional, the effectiveness of OJK is questioned and corruption within OJK would flourish.

Further complexity that may arise in the establishment of OJK is the contradiction between OJK Draft Act with other established Acts given below.

1. Banking Act, No. 10/1998
2. Bank of Indonesia Act, No. 6/2009
3. Cooperatives act, No. 25/1992
4. Stock market act, No. 8/1995
5. Insurance act, No. 2/1992
6. Presidential Decree No. 9/2009 regarding Financial Institutions.

The immediate solution is the amendment of the established Acts to conform to OJK Act. The history suggests, however, that an amendment to a particular Act is far from a straightforward effort since it may take years. For example, establishment of Money Laundering Act took four years in the legislation. The Draft Act was proposed to the legislation in 2006 and became one of the priorities of the legislation in 2007. Nonetheless, the discussion of the Draft Act never reaches to a conclusion until October 2010. This incidence suggests that amendment of the established Acts related to financial industry will not be immediate.

4. Estimated Costs of OJK

The establishment costs of OJK will certainly be a very expensive lunch. The costs not only consist of accounting cost such as operational cost but also economic cost such as transition costs. We estimate the costs of establishment strictly within the boundary of OJK Draft Act. The category of the establishment costs is given below.

1. Fixed establishment cost of OJK as mandated by the Draft Act. The investment includes costs of establishing regional offices, recruiting human resources, and establishing information and technology (IT) system. The cost also includes the changeover cost of banking supervision IT system from Bank of Indonesia to OJK.

2. Operational cost of OJK as mandated by the Draft Act. The cost includes all expenses in the supervision of financial industry such as training cost for field supervisors, on- and

off-site supervision of financial institutions, wages, maintenance cost, and cost of operating IT.

Two costs described above are tangible and observable. There is also possibility of intangible and unobservable cost in the establishment of OJK. Caution should be taken during the transition period of banking supervision from Bank of Indonesia to OJK, since it may hinder costs. The cost includes the loss of tacit knowledge of banking supervision by the institution.

The establishment and operation cost of OJK can be classified into short-term and long-term cost. The short-term cost includes the following details.

1. Establishment and transition cost of IT system
2. Recruitment cost of human resource
3. Training cost of field supervisors
4. Establishment cost of regional offices
5. Establishment cost of organizational blueprint and standard procedures
6. Contingency cost of economic vulnerability during transition

The long-term cost of establishing OJK includes the following details.

1. Reluctance of established banking supervisors in Bank of Indonesia to be incorporated to OJK.
2. Loss of tacit knowledge concerning supervising technique and system which has been long established.
3. Sharp increase in operational cost due to the enormous number of financial institutions that needs to be supervised.
4. The cost of amending established Law which will be necessary since inconsistency of Draft Law of OJK with established Law is perceptible.

We summarize our argument of establishment costs, particularly the short-term costs, in Table 5.

Table 5. Type of Transisition of Supervision of the existing regulators to OJK

Transition costs	
Type	**Arguments**
Establishment cost of IT system for OJK and transition cost of switching IT system from Bank Indonesia	The existing IT system in Bank Indonesia is designed to monitor banking industry which includes 122 banks with 3,041 offices and 1,861 BPR. OJK must establish IT system that supports comprehensive data from the industry which consists of 1,670 nonbanking institutions and a staggering 86,504 nonbanking microfinancial services (as of 2009).
Recruitment cost of human resources	Assuming all bank supervisors from Bank Indonesia join OJK, the institution needs to recruit additional staffs to supervise 86,504 nonbanking institutions. These supervisors will perform on- and off- supervision of banking and nonbanking institutions. The assumption however is not too realistic. The more sensible approach is to assume 10%-20% of banking supervisors from Bank Indonesia will refuse to join OJK.
Training cost of new supervisors and advanced training cost for established supervisors	The additional supervising burden of 86,504 institutions induces the need of additional staffs. These additional staffs need to be trained according to their role in the organization. Note that one staff has to pursue multiple levels of training in order to gain the "know-how."
Establishment cost of regional offices which includes land-acquisition cost, building-construction cost, furnishing cost, and other cost of assets such as vehicle purchase.	OJK will not only operate in headquarter office but also in the regions. Such scope of operation is necessary to practice microprudential supervision which includes on- and off-site supervisions. Regional offices must be able to accommodate supervision activities of 86,504 financial institutions. This scenario assumes Bank Indonesia performs banking supervision.
Establishment cost of organizational blueprint and standard of procedure	The establishment of these features is important by looking at the scope and size of OJK. These features will be important to avoid any unnecessary dispute. The average time needed for government institutions such as LPS (Indonesia Credit Insurance Cooperation), KPK (Corruption Eradication Commissioner), PPATK (Indonesia Financial Transaction Reports and Analysis), and BNPB (National Board of Disaster Management) is one to two years. Note that the effectiveness of the organization may not be optimal during the establishment process of the organizational blueprint.
Vulnerability of the economy to potential crisis	OJK is responsible for macro- and micro supervision as well as business conduct supervision. Hence, OJK is expected to be the forefront to face imminent crisis. This role will not be optimal during transition period therefore vulnerability of the economy is high during that that period.

It should be noted that the short-term costs alone may not necessarily sufficient to estimate the cost of establishment. The short-term costs and also the long-term costs of establishing OJK should also be taken into consideration. The long-term costs are essentially the costs that may not be observable but will incur during the process of establishment. Table 6 summarizes these long-term costs.

Table 6. Long-Term Cost Due to OJK Establishment

Long Term Costs	
Types	**Arguments**
Reluctance of established banking supervisors in Bank Indonesia to be incorporated to OJK	The switch of banking supervision authority from Bank Indonesia to OJK may induce experienced and highly qualified supervisors to quit. The performance of OJK may not be optimal as they need to invest their resources immensely to train new supervisors.
Loss of tacit knowledge concerning supervising technique and system which has been long established	Supervisors' expertise cannot be foster with a blink of an eye. Multiple levels of training and field experiences are necessary inputs to establish an expertise. Furthermore, the characteristics of each business entity should be taken into consideration. Supervising knowledge and experience will accumulate along time and create tacit knowledge. Authority delegation to OJK does not guarantee that tacit knowledge will be successfully transferred from previous institutions.
Sharp increase in operational cost due to the enormous number of financial institutions that needs to be supervised	Operational cost of supervision will increase drastically due to enormous scope and size of supervision. There is an additional 86,011 firms to be directly supervised hence it is necessary for OJK to enlarge its operational capacity.

The estimation of establishment costs of OJK is based on several assumptions. First, additional staffs, especially financial supervisors, needed to be recruited to optimize the effectiveness of supervision of OJK. Second, it is inevitable that new investment should be made for establishing IT system for OJK. Third, in order to maintain OJK's effectiveness and credibility in the supervision, regional offices are required to be established across Indonesia. In this section, the cost of building regional offices in regions is estimated.

The cost of banking supervision is very expensive as experienced by Bank of Indonesia. This occurs because of complexity of the supervision process. Off-site supervision is conducted every minute of the hour using real time data. Bank of Indonesia also needs to conduct on-site supervision to each bank's head office plus its branch office in several regions. Indeed Bank of Indonesia may not be able to conduct on-site supervision to all bank's branch offices, hence, violations in branch offices are possible with higher likelihood.

Table 7. Estimated Coverage of Supervision by OJK

Type of Financial Institution	Classification	Number of Units	Number of Supervised Office	**Total Number of Supervised Office**
Bank Financial Institutions	Large Bank	42	8	336
	Medium Bank	55	5	275
	Small Bank	24	3	72
	Syariah Bank	169	3	507
	BPR	1.712	1	1.712
	Sub-Total (A)			2.902
Non-Bank Financia Institutions (Non-Micro)	Insurance	144	1	144
	Stock Market	499	1	499
	Bond Market	184	1	184
	Securities Companies	158	1	158
	Pawn System Companies	1	1	1
	Pension Funds	406	1	406
	Financing Companies	212	1	212
	Capital Venture Companies	66	1	66
	Sub-Total (B)	1.670		1.670
Micosclae Nonbanking Financial Institutions (MNBFI)	(MNBFI) (Sub-Total) (C)	86.504	1	86.504
Additional Supervision Personnel: [C/(10(A+B))]Ratio (low scenario)*				8.650
Additional Supervision Personnel: [C/(5(A+B))] Ratio (high scenario)*				17.301

Sources: BI (2010a; 2010e), Bapepam-LK (2009), Biro Dana Pensiun (2009), Biro Perasuransian (2008)

Notes:

*) For large banks, visitation is at the head offiice and seven branch offices. It is assumed form small and medium banks will visited. It is assumed that BPR has no branches, thus every BPR will be visited. For Non-Micro NBFI, it is assumed that their scale is equal to small and medium banks and respectively three and five offices will be visited. As BPR, every microscale NBFI will visited.

**) In high scenario, it is assumed that every Non-Micro NBFI has equally scale as small banks small banks, thus for them will being visited by three offices. Untuk skenario rendah diasumsikan setiap LKNB Non-Mikro memiliki skala mirip dengan Bank Kecil, sehingga untuk masing-masing unit usaha akan divisitas tiga kantor.

~) In low scenario, it is assumed that every Non-Micro NBFII has equally scale as small banks, thus for them will being visited by five offices.

Selection of appropriate sampling method is essential to ensure better compliance. The supervision method must be designed in such way that detection rate of violation is high. This will induce financial institutions to conform to the rule or face penalty for their violation.

However, such method will not be acquired in cut-rate. Table 7 shows possible supervision scenarios by OJK.

Table 7 assumes two scenarios: low and high ratios of supervisor to number of institutions. According to the former scenario, one supervisor will monitor 5 to 10 microscale nonbanking institutions. Therefore, a number of 8,650 additional supervisors are needed. The latter scenario assumes that one supervisor monitor 5 microscale nonbanking institutions therefore a total 17,301 additional supervisors are needed. This number is very conservative since each supervisor will not be able to conduct supervision by himself without any assistance from supporting staffs.

The estimation above is based on assumption that the ratio of additional supervisors to number of banking institutions is similar to that of nonbanking institution. Indeed, this assumption is quite strong since it does not reflect the variability in supervision burden of banking and nonbanking institutions. Types and scale of transaction as well as market conditions will certainly contribute to the variability. Further work to examine comprehensively the variability in the burden of supervision between banking and nonbanking institutions is highly encouraged.

Essential cost that must be taken into account is the cost of staff recruitment, cost of their compensation and training. The cost of recruitment will not be economical since OJK needs to employ 8,650 to 17,301 staffs at minimum. Additionally, those staffs need to be properly trained with various levels depending on their role in the organization.

Table 8 shows the number of accounts in banking and nonbanking industries. There are 83 million accounts in the banking industry. The total account in the nonbanking industry reaches 141,887,323 which are 171% higher than that of banking industry. It should be noted. However, that this number is conservative since accounts in cooperatives-based financial institutions have not been accounted. The data for BMT is patchy and the latest information that can be gathered is based on 2006 data.

Table 8. Number of Accounts of Banking and NonBanking Industries

TYPE	INSTITUTION	NUMBER OF ACCOUNTS
Bank and BPR	Conventioanl Bank	65.785.523
	Syariah Bank	5.643.087
	BPR and BPRS	11.571.390
	Sub Total (A)	***83.000.000***
Lembaga Keuangan Nonbank	Insurances[1]	43.410.774
	Pawn System Companies	20.978.984
	Pension Fund	2.559.222
	Capital Venture Companies	25.942
	Micorscale Financial Institution	41.396.401
	Government's Program	17.033.000
	Sub Total (B)	***125.404.323***
Microscales Cooperatives	KSP	n.a.
	KJKS	n.a.
	USP	n.a
	UJKS	n.a
Microscale Non-Bank and Non-Cooperatives	BKD	675
	LPD	362
	LDKP	n.a
	BK3D	964
	Pawn office	n.a
	PNM (Unit Layanan Modal Mikro / UlaMM)	13.021.000
	BMT	1.175.000
	LKM LSM	286
	Sub Total (C)	***16.483.000***
Total (A+B+C)		**224.887.323**
Rasio (A+B+C)/A		**2,71**

Sources: calcutated from Bank Indonesia (2010e), Bapepam-LK (2009), Pawn office (2010), Perasuransian Indonesia (2008), Ashari (2006), The Ministry of KUKM (2009), GTZ (2005)

In order to estimate the IT cost for OJK, the cost of establishing the IT cost of Bank Mandiri has been used as a benchmark. Bank Mandiri is the biggest bank in Indonesia in terms of asset. Bank Mandiri invested US$200 million to establish their IT system (Bank Mandiri, 2001). Their system connects 1,108 branch offices across the country. Technological progress since 2001 without any doubt improve IT system and may decrease the cost. Using this assumption, it is estimated that the cost of IT system for OJK reaches US$200 million or approximately Rp2 trillion.[18]

Table 7 shows that for the case of banking supervision, there are 2,902 banking units and 1,670 nonbanking units to be supervised regularly. The total staffs for this supervision activity reaches an estimate of 2,297, this figure is equal to the number of supervisors in 41 Bank Indonesia regional offices, one Bank of Indonesia headquarter and one Bapepam-LK headquarter. Earlier two scenarios of additional supervisors necessary for OJK were discussed. Assuming of low scenario, the ratio of 86,520 units to 2,297 staff equals to 3.7; his implies that OJK needs 155 regional offices. High scenario implies the ratio of 7.5 which suggests that OJK needs 310 regional offices for optimum supervision. The estimation above is based on assumption that all banking and nonbanking supervisors in Bank Indonesia and Bapepam-LK are relocated to OJK.[19]

In order to estimate the cost of establishing those regional offices of OJK, information from the increase in the number of BPK's (The Supreme Audit Board) regional offices during 2004-2009 will be used as a proxy for the estimation. BPK has only 7 regional offices in 2004, the number increased to 33 in 2009. The real value of BPK's assets in 2004 was Rp284.27 billion according to 2009 prices. The value increased to Rp2.76 trillion in 2009. The value of assets is based on the value of land, equipments and machines, building, and other relevant assets. The increase of these assets accounted for Rp1.88 trillion in 2009 prices and it was accounted for establishment of 26 regional offices.

It will be misleading to assume that the increase in asset is due to increase in number of regional offices. Increase in asset value may be due to improvement in facilities in BPK headquarters or previously established offices. Therefore, a moderate assumption that only 80% of increase in asset value is due to establishment of new regional offices has been used. Based on the assumption the increase of asset value due to establishment of regional offices accounted for Rp1.51 trillion or Rp58.11 billion for each office. This estimate of cost consists of

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[18] Assume conservative exchange rate of Rp10,000 for every US$1

[19] The number of regional offices = the number of estimated staffs/2,297; the denominator represent the benchmark number of staffs from 42 Bank Indonesia regional offiece s.

land-acquisition cost, building-construction cost, equipment cost, and other cost of assets such as vehicle purchase

Table 9: Estimated Costs of Establishment and Operational of OJK

Type of Fixed Cost	Cost per Unit	Unit		Total Cost	
		Low Scenario	**High Scenario**	**Low Scenario**	**High Scenario**
Cost of OJK Draft Law Represntatices	Rp58,11 billion	155	310	Rp9.007 billion	Rp18.014 billion
Cost of Recruitment and Tranining					
BI Supervisor ^	Rp50 million	0	359	0	Rp17,95 billion
Bapepam Supervisor	Rp50 million	0	0	0	0
Additional Supervisor					
	Rp50 million	8650	17301	Rp432,50 billion	Rp865,05 billion
IT Setup Cost	Rp1.800 billion	1	1	Rp1.800 billion	Rp1.800 billion
Sub Total (A)				**Rp11,240 trillion**	**Rp 20,697 trillion**
Type of Annual Operating Cost					
Cost of Domestic Employees Tranining **					
BI Supervisor	Rp25 million	1,437	1,437	Rp35,93 billion	Rp35,93 billion
Bapepam Supervisor	Rp25 million	863	863	Rp21,58 billion	Rp21,58 billion
Additional Supervisor	Rp25 million	8650	17301	Rp216,25 billion	Rp432,53 billion
Cost of Overseas Employees Training **					
BI Supervisor	Rp50million	30	30	Rp1,50 billion	Rp1,50 billion
Bapepam Supervisor	Rp50million	18	18	Rp0,900 billion	Rp0,900 billion
Additional Supervisor ^^	Rp50million	463	926	Rp23,15 billion	Rp46,30 billion
IT Operational and Maintenances Cost *	Rp180 billion	1	1	Rp180 billion	Rp180 billion
Cost of Salaries and Wages **					
BI Supervisor	Rp765 million	1,437	1,437	Rp1.100 trillion	Rp1.100Trillion
Bapepam Supervisor	Rp765 million	863	863	Rp660,61 billion	Rp660,61 billion
Additional Supervisor ^^	Rp765 million	8650	17301	Rp6.621,82 billion	Rp13.243,63 billion
Operational Supervision Cost**					
BI Supervisor	Rp139 million	1,437	1,437	Rp200 billion	Rp200 billion
Bapepam Supervisor	Rp139 million	863	863	Rp120 billion	Rp120 billion
Additional Supervisor ^^	Rp139 million	8650	17301	Rp1.203,90 billion	Rp2.407,93 billion
Facilites and Equipment Maintenances Cost *	Rp5,81 billion	155	310	Rp900,55 billion	Rp1.801 billion
Sub Total (B)				**Rp11,286 trillion**	**Rp20, 252 trillion**

Notes:
*) It is assumed the maintenance cost is 10% per annum of the total construction cost of a representative office.
**) The average salary cost of Bapepam and Addional Supervisors in OJK scenario will be equated to BI's expense in order to satisty incentive compatibility and participation constraint.
^) In the low scenario, it assumed that all supervisors are wiliing to change their statius as OJK's version employees. In the high scenario, it is assumed that 20% of BI supervisors are unwilling to join the OJK employee version.
^^) The supervision of microscale NBFIs will be matched with microscale BPRs. Especially for mirco NBFIs, it assumed that one supervior will handle between 5 to 10 NBFIs. The number of microscle NBFIs is 86,504. (Cooperatives data were not included and BMT data is based on 2006 data).
~) Based on Bank Mandiri's expenditure when merged.

The estimation of OJK's establishment and operational costs above were conservative and the estimation was based on the following assumptions:

1. The supervision burden of banking and nonbanking institutions is equivalent. This assumption is very strong since we have no necessary data from previous research that estimate the real burden of banking and nonbanking supervision. The variability of transaction types within nonbanking supervision should also account for different measure of supervision burden.

2. Recruitment and training cost of additional staffs in high scenario assumes that 20% of supervisors from Bank Indonesia do not join OJK. This moderate assumption is looking at the fact that the decision to join OJK is very subjective. Supervisors in Bank Indonesia who view that this unification is full of uncertainty and has status quo bias will have less willingness to join OJK.

3. Depreciation cost of building and IT system is assumed to be 10% each year. This assumption is derived from Ministry Decree *Kimpraswil* No. 332/KPTS/M/2002. It states that maximum maintenance cost of minor damage is 30% of cost of building that particular infrastructure; however, it is assumed that the depreciation rate is only 10% per year.
4. The establishment cost of IT system refers to Bank Mandiri that is US$200 million. Using conservative exchange rate of Rp9,000 per US$1, the cost of establishment is Rp1.8 trillion. The cost that Bank Mandiri bear was actually for the establishment of IT system, not on purchase of hardware. Again, our assumption is moderate looking at the fact that Rp1.8 trillion will be spent on both establishing IT system and purchasing hardware for 155-310 regional offices.
5. The wage and compensation for staffs in OJK will be assumed to be similar to those of supervisors in Bank of Indonesia. This assumption arises to present incentive

compatibility and participation constraint due to unification from various institutions to OJK. There will be little incentive for supervisors from Bank Indonesia to join OJK if this assumption does not hold.

Table 9 summarizes the estimation of OJK's establishment cost. The transition cost of switching supervision authority from the existing regulators to OJK accounted for Rp11.24 trillion to Rp20.69 trillion. The annual operational cost reaches similar figures of Rp11.28 trillion to Rp20.25 trillion. These estimates will effortlessly change if there are departures from the assumptions. For example, the figure would change if the Draft Act includes cooperatives as well. The estimated costs would increase if the supervision burden of banking and nonbanking institutions is different.

Further inquiry regarding OJK is who would fund these enormous costs of establishment? The first sensible alternative is APBN (national budget). The national budget in 2011 will bear an extra of Rp22.52 trillion to Rp40.94 trillion—depending on the scenario—or 1.9% to 3.4% from the total budget of Rp1,204 trillion. This proportion is relatively huge in comparison of the GOI's spending in other fields: (1) the proportion of wage and compensation of civil servants was 7.4% in 2010; (2) the proportion of Ministry of Health's budget was only 2% in 2010; (3) the proportion of agricultural sector subsidy was 1.3% in 2010; (4) the proportion of food subsidy was 1.2% in 2010; (5) the proportion of health subsidy was only 0.034% in 2010 (The Ministry of Finance, 2010).

The second feasible alternative is funding from loan. This alternative must be carefully examined since there would be additional Rp48 trillion of debt added. The range of debt that Indonesia had taken during 2006-2009 was Rp13.3 trillion to Rp46.9 trillion. Assuming the debt in 2011 is similar to that of in 2010 plus the cost of OJK's establishment, the national debt would increase about 30% to 55%, totaling Rp75 trillion. This amount is much larger than the highest debt that Indonesia has ever taken. This option will eventually put burden on the national budget in latter period.

There is also time cost in the establishment of OJK. Martinez and Rose (2003), who studied cases from 14 countries, suggest that time cost include establishment of organization structure, law structure, strategic plan, integration of IT system, division of tasks, and and appointment of person in charge in each division. It may take up to two years to establish such institution. Their suggestion, however, are based on cases in developed countries where flow of information are relatively better than that in Indonesia. Without hesitation, we may expect that establishment of OJK requires more than 2 years.

5. Financial Supervision System Alternative

Incentives for corruption, money laundering, and manipulation are essentially trigerred by asymmetric information. Asymetric information problems in financial sector is paramount, unless financial institutions (financial supervisory bodies) implement extra cautious approach to know their customers (supervisees). Two key motives for the use of extra cautious approach in financial supervision are due to the problems of asymmetric information and the possibility of financial sector to contribute to systemic risk to the economy.

Households, for example, may borrow from bank and nonbanking institution at the same time. Ideally, the maximum monthly installment is 1/3 of household income; however, the true income is now biased upward since households borrow from two different sources. This may not be evident in the financial system accounting since there is no server that consolidates information from banking and nonbanking institutions. In other word, Bank Indonesia, Bapepam-LK, and the Ministry of KUKM do not share information that allows data sharing and data interfacing among the regulators. This phenomenon leads to low detection rate in monitoring potential offences by households.

Criminal offences in financial sectors are also evident from the point of view of the capital owners. The major fraudulent case in financial sector known as *Antaboga Case* is a manifestation of absence of database sharing among the existing regulators. Evident cases of offences in financial sectors either from the households or the capital owners' side are just the tip of the iceberg. There is no real figure of these practices. The only apparent consequence is the increase of vulnerability of the economy to crisis.

Having realized that the major problem faced by the existing authorities is criminal offences in financial sector, ideally, any attempt to establish financial regulatory authority aims to minimized the occurrence of those practices and systemic risk. Those attempts may include improvement in the flow and quality of information, transparency of the financial institutions, and improvement in the coordination among regulatory authorities.

Ironically, OJK Draft Act did not reveal any strategy to minimize those offences. The majority of articles in the Draft Act merely address the process of establishing OJK. Issues regarding improvement of coordination, strategies and mechanism of data sharing and data interfacing, as well as strategies to increase the effectiveness of supervision were not discussed in the Draft Act.

The existence of the Draft Act is another manifestation of beliefs that any emerging problem must be handled by establishing a new institution. Policymakers simply disregard the fact that establishing a new institution may induce new problems. In addition, establishment of a new institution is a costly decision in monetary term. As previously discussed, the cost of establishment includes, but not limited to, cost of establishing district offices, IT system, organizational blueprint, recruiting human resources, and other costs.

Learning from recent experiences, the establishment of new institutions in Indonesia such as Corruption Eradication Committee (KPK), Indonesia Financial Transaction Report and Analysis Centre (PPATK), Indonesia Deposit Insurance Cooperation (LPS), and Indonesian National Board for Disaster Management (BNPB) requires at least two years before each operates optimally as an institution. During the transition period, each institution will focus on how to unravel organizational quandaries within the institution. BNPB is an example of such dilemma. The institution was acknowledged in October 2007 and was planned to establish 399 district offices. Until recently, there are only 108 district offices established.

Efforts to minimize asymmetric information will be optimal if policymakers focus on attempts to increase transparency within the existing regulators. Nevertheless, the draft act only focuses on the establishment of a new institution. Doubts have surfaced whether the establishment of OJK will be effective in optimizing the supervision of financial sector. The establishment of OJK, nonetheless, will not eliminate structural problem in the existing supervision scheme. There still are thousands of nonbanking institutions that will not be supervised optimally even if OJK would be established. If one of these institutionspractices moral hazard, the defenseless society will be the one who burden the damage caused.

We present two alternative supervision methods, labeled as SPLK (system pengawasan lembaga keuangan) or Financial Institutions Supervision System. We designed the system mainly by considering the structure of Indonesian financial market. The system is also designed to accommodate the economic and cultural state of the country. Our further principle is that we don't need costly establishment cost if we can optimize a framework with relatively low cost. Furthermore, we hold the principle that we should optimize the role existing authorities instead of setting up a new one.

5.1. First Alternative: The Three-Pillar Model

Our first alternative of SPLK is the Three-Pillar System (Figure 1). The system utilizes existing regulators: Bank Indonesia, Bapepam-LK, and the Ministry of KUKM. The system require *renaissance* of these authorities, particularly by: (1) increasing the supervision quality of the three authorities and level out their responsibility in the supervision of financial sector; (2) implementing obligation of data sharing and data interfacing among the three authorities.

The focus of supervision of the three authorities will differ since each will implement particular method that conforms to the characteristic of the supervisees. Supervision of banking institutions by Bank of Indonesia will focus on prudential aspects such as macroprudential, microprudential, and conduct of business. Supervision of stock market by Bapepam-LK will focus on conformity principle and supervision of the Ministry of KUKM focuses on cooperatives principles. The variability in the supervision system is logical; however standardization of supervision quality is indispensable.

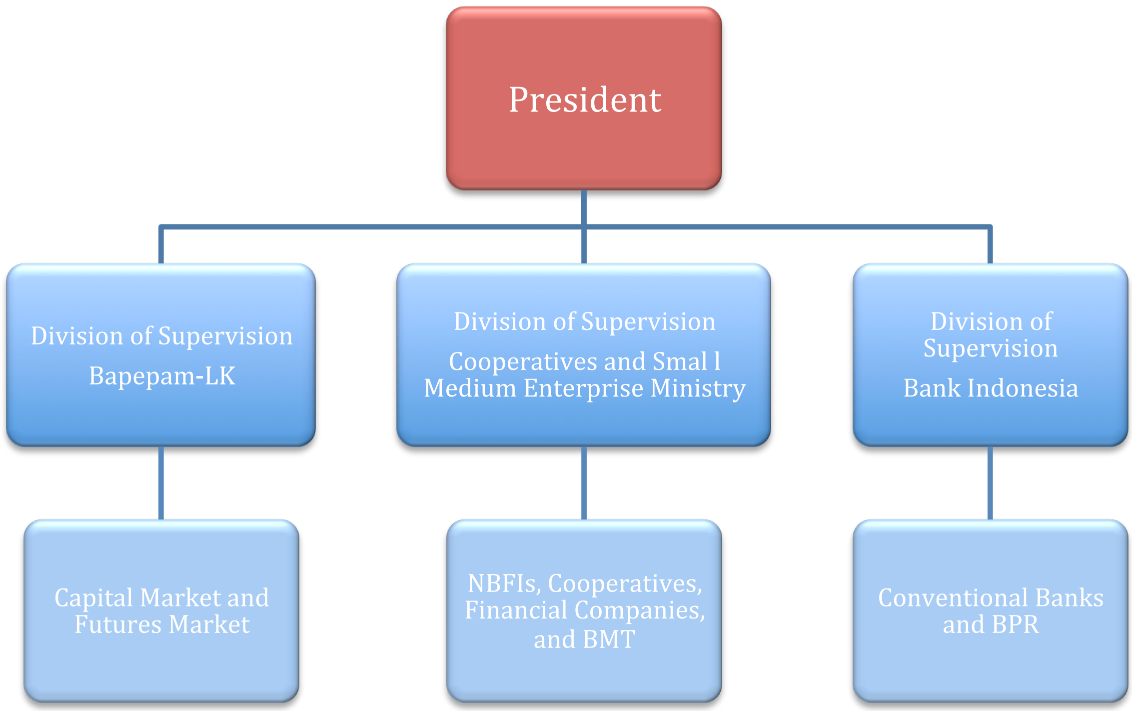

Figure 5: The Three Pilar Model

It is envisaged that the three authorities will practice data sharing and data interfacing. Figure 1 shows the consolidation of information among the authorities. The arrows imply active exchange of information among the authorities which will increase the detection rate of moral hazard practices. We apply Becker's (1968) approach that increase the detection rate of crime activities as an effort to increase the deterrence effect of potential offenders. Data sharing and data interfacing is not a rocket science in today's modern era and they will excel detection rate precipitously with relatively lower cost.

The Three Pillar System proposed a change in the existing supervision structure. Bapepam-LK will focus on regulating and supervising stock market and commodity market.[20] The system shall not put burden on Bapepam-LK on supervising nonbanking institutions which are spread around the country. We suggested that the role of regulating and supervising nonbanking institutions should be assigned to the Ministry of KUKM. We believe this proposal is sensible since the Ministry of KUKM possesses district offices throughout the country. The Ministry of KUKM will supervise cooperative, credit union, and BMT, as well as microfinancial institutions.

[20] Commodity market is currently supervised and regulated by the Ministry of Industry.

We argue that the Ministry of KUKM is capable of such responsibility since they have been supervising 71,000 cooperatives in recent years. Last of all, Bank of Indonesia will still hold the responsibility to regulate and supervise banking and BPR.

This system should directly be responsible to the president since the wellbeing of financial sector is the responsibility of the executives.

5.2. Two- Stage System

We proposed the second alternative which is entitled as the Two-Stage System. The system is the modification of the Three-Pillar System by incorporating PPATK into the system (Figure 2). PPATK will ensure that data sharing and data interfacing are implemented by the authorities. We have argued previously that individuals might have low tendency in coordination, yet again their different badges. This will likely induce egocentrism among governing authorities. This phenomenon is practical not only Indonesia but also in the more developed economies.

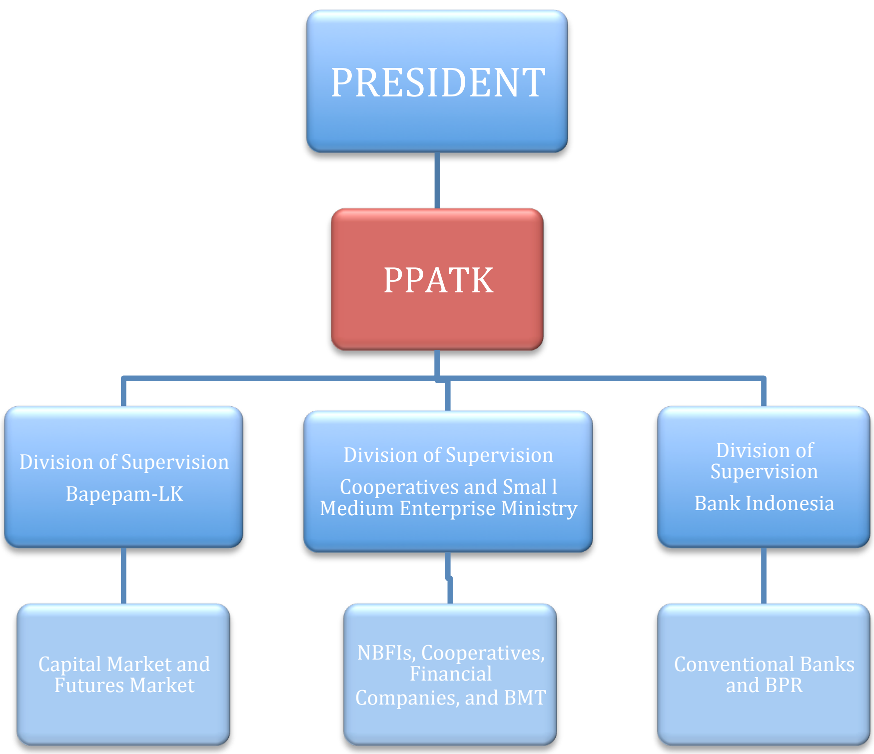

Figure 6: Two Stage System

This scheme suggests that each authority holds *all* responsibilities of supervising its particular sector. For example, Bank Indonesia (the Ministry of KUKM) will be responsible for all transactions that occurred among banks (cooperatives). We noted that financial transactions have occurred intermarket. The responsibility of supervising this range of transactions is assigned to PPATK. The outcome of this assignment is that PPATK must have investigation authority. This mechanism is very practical since PPATK is the coordinator of data sharing and data interfacing. If PPATK possesses data consolidation therefore its detection capabilities is supreme.[21]

Technically, this system is more superior to the Three-Pillar System since PPATK will actively bridge the gap in terms of data sharing and data interfacing. We noted the complexity of this system that is the need to augment PPATK's role to investigating authority requires amendment of Anti Money Laundering Act (UU Tindak Pidana Pencucian Uang or TPPU).[22] Nevertheless, the complexity of amending this particular Bill is relatively straightforward in comparison to amending several Acts owing to the establishment OJK.

6. Conclusion

The establishment of a financial service regulatory authority aims to enhance the existing financial supervision system. This, however, may not be the case for the GOI's proposal to establish OJK through OJK Draft Act. The existing system of financial supervision is characterized by a huge gap in supervision, whereby thousand of nonbanking institutions have not been supervised properly. The proposal of establishing OJK, however, may not be able to close the gap.

Currently the existing financial regulators have different approach in supervising financial institutions depending on the supervisees' characteristics. Thus far, the quality of supervision by the regulators is far from homogeneous, therefore the improvement and the standarsization of supervision quality is indispensable. Ideally, any attempt to establish a financial service

[21] PPATK does not have the investigation authority currently. This is a setback in the effort of corruption eradication. Furthermore, UNCIC stated that money laundering is an act of corruption. However, Anti-Corruption Bill in Indonesia does not consider money laundering as such.

[22] The money laundering act (UU TPPU) which was ratified in October 2010 was first proposed in 2006.

regulatory authority should be able to improve and to standardize the quality of financial supervision; however this may not be the case for OJK.

Any attempt to establish an institution as a reaction to solve any emerging problem is obviously costly. It was shown that the estimated costs of establishing OJK is paramount, however, the effectiveness of OJK is questionable. This gives rises to two alternative approaches of establishing a financial service regulatory authority namely the Three-Pillar system and the Two-Stage system. Both approaches provide a good opportunity for the GOI to overhaul the system of financial supervision and to reshape the system in a better way.

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